

SEQUENCE LISTING

<110> RIKEN

<120> Method of producing template DNA and method of producing protein in cell-free protein synthesis system using the same

<130> RFH13-091T

<140> PCT/JP02/06261

<141> 2002-06-24

<150> JP P2001-201356

<151> 2001-07-02

<160> 24

<170> PatentIn version 3.1

<210> 1

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> native His tag

<400> 1

Met Lys Asp His Leu Ile His Asn Val His Lys Glu Glu His Ala His
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Ala His Asn Lys
20

<210> 2

<211> 605

<212> DNA

<213> Artificial Sequence

<220>

<223> double stranded linear DNA coding for Ras protein

<400> 2

ggcgatatac tatgaccgaa tacaaactgg ttgtagttgg cgctggtggt gtaggcaaaa 60

gcgcgtgac caticagtig atccagaacc acttcgtaga tgagtacgac ccgactattg 120
aagactctta ccgtaagcag gtigtatcg acggtgagac ctgtttgctg gacatccttg 180
ataccgcagg ccaagaagaa tactctgcta tgcgtgatca gtatatgcgt accggcgaag 240
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gtgaacagat caaacgtgtt aaagactctg atgacgttcc gatggttctg gttggtaaca 360
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acggaattcc gtacatcgaa acctctgcta aaactcgta aggcgtaga gacgcttctt 480
acaccttggt tcgtgaaatc cgtcagcaca agctgcgtaa gctttgatag aattccgtga 540
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ccgct 605

<210> 3
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> 5' primer-1 universal

<400> 3
ccgaaggagc cgccaccat 19

<210> 4
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> 5' primer-2 for Ras

<400> 4
gaaggagccg ccaccatgac cgaatacaaa ctggtttag 40

<210> 5
<211> 26
<212> DNA

<213> Artificial Sequence

<220>

<223> 3' primer universal

<400> 5

gcgataaca atttcacaca ggaaac

26

<210> 6

<211> 844

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' DNA fragment comprising GST tag sequence

<400> 6

ccgctgtcct cgttcccagc ccatgattac gaattcagat ctcgatcccg cgaaattaat 60

acgactcact ataggagac cacaacggtt tccctctaga aataattttg tttaacttta 120

agaaggagat atacatatgt cccctatact aggttattgg aaaattaagg gccttgtgca 180

accactcga cttcttttgg aatatcttga agaaaaatat gaagagcatt tgtatgagcg 240

cgatgaaggt gataaatggc gaaacaaaaa gtttgaattg ggtttggagt ttcccaatct 300

tccttattat attgatggtg atgttaaatt aacacagict atggccatca tacgttatat 360

agctgacaag cacaacatgt tgggtggttg tccaaaagag cgtgcagaga tttcaatgct 420

tgaaggagcg gttttggata ttagatacgg tgtttcgaga attgcatata gtaaagactt 480

tgaaactctc aaagttgatt ttcttagcaa gctacctgaa atgctgaaaa tgttcgaaga 540

tcgtttatgt cataaaacat atttaaattg tgatcatgta acccatcctg acttcatgtt 600

gtagtacgct cttgatgttg ttttatacat ggacceaatg tgcctggatg cgttcccaaa 660

attagtttgi tttaaaaaac gtattgaagc tateccacaa attgataagt acttgaaatc 720

cagcaaglat atagcatggc ctttgcaggg ctggcaagcc acgtttgggtg gtggcgacca 780

tcctccaaaa tcggatagct ctggcgccct cctgggtgcca cgcggatccg aaggagccgc 840

cacc

844

<210> 7
 <211> 217
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> 5' DNA fragment comprising His tag sequence

<400> 7
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 acgactcact ataggagac cacaacggtt tccctctaga aataattttg tttacttta 120
 agaaggagat atacatatga aaggcagcag ccatcatcat catcatcaca gcagcggcgc 180
 ctccctgggtg ccacgcggat ccgaaggagc cgccacc 217

<210> 8
 <211> 244
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> 5' DNA fragment comprising native His tag sequence

<400> 8
 ccgctgtcct cgttcccagc ccatgattac gaattcagat ctcgatcccg cgaaattaat 60
 acgactcact ataggagac cacaacggtt tccctctaga aataattttg tttacttta 120
 agaaggagat atacatatga aagatcatct catccacaat gtccacaaag aggagcacgc 180
 tcatgccac aacaagagct ctggcgccct cctgggtcca cgcggatccg aaggagccgc 240
 cacc 244

<210> 9
 <211> 652
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> 5' DNA fragment comprising CBD

<400> 9

ccgctgtcct cgttcccagc ccatgattac gaattcagat ctcgatcccg cgaaattaat	60
acgactcact atagggagac cacaacgggt tccctctaga aataattttg tttaacttta	120
agaaggagat atacatatgt cagtigaatt ttacaactct aacaaatcag cacaacaaaa	180
ctcaattaca ccaataatca aaattactaa cacatctgac agtgatttaa atttaaatga	240
cgtaaaagtt agatatattt acacaagtga tggtagacaa ggacaaactt tctgggtgta	300
ccatgctggt gcattattag gaaatagcta tgttgataac actagcaaag tgacagcaaa	360
cttcgttaaa gaaacagcaa gccaacatc aacctatgat acatatgttg aatttggatt	420
tgcaagcgga gcagctactc ttaaaaaagg acaatttata actattcaag gaagaataac	480
aaaatcagac tgggtcaaaact acactcaaac aaatgactat tcattigatg caagtagttc	540
aacaccagtt gtaaatacaa aagttacagg atatataggt ggagctaaag ttcttggtag	600
agcaagctct ggcgccctcc tggtagccac cggatccgaa ggagccgcca cc	652

<210> 10

<211> 511

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' DNA fragment comprising Thioredoxin sequence

<400> 10

ccgctgtcct cgttcccagc ccatgattac gaattcagat ctcgatcccg cgaaattaat	60
acgactcact atagggagac cacaacgggt tccctctaga aataattttg tttaacttta	120
agaaggagat atacatatga gcgataaaat tattcacctg actgacgaca gttttgacac	180
ggatgtactc aaagcggacg gggcgatcct cgtcgatttc tgggcagagt ggtgcggtcc	240
gtgcaaaatg atcgccccga ttctggatga aatcgctgac gaatatcagg gcaaactgac	300
cgttgcaaaa ctgaacatcg atcaaaaccc tggcactgcg ccgaaatatg gcatccgtgg	360
tatcccgact ctgctgctgt tcaaaaacgg tgaagtggcg gcaaccaaag tgggtgcact	420
gtctaaaggt cagttgaaag agttcctcga cgctaacctg gccagctctg gcgcctccct	480

ggtgccacgc ggatccgaag gagccgccac c 511

<210> 11
 <211> 183
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> 3' DNA fragment comprising T7 terminator

<400> 11
 gtttcctgtg tgaaattgtt atccgctgct gagttggctg ctgccaccgc tgagcaataa 60
 ctagcataac cccctggggc ctctaaacgg gtcttgaggg gttttttgct gaaaggagga 120
 actatataccg gataacctcg agctgcaggc atgcaagcct ggggctggga acgaggacag 180
 cgg 183

<210> 12
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> universal primer for 2nd PCR

<400> 12
 gccgctgtcc tcgttcccag cc 22

<210> 13
 <211> 760
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> double stranded linear DNA coding for CAT protein

<400> 13
 ggcgtataca tatggagaaa aaaatcactg gatataccac cgttgatata tcccaatggc 60
 atcgtaaaga acattttgag gcatttcagt cagttgctca atgtacctat aaccagaccg 120
 ttcagctgga tattacggcc tttttaaaga ccgtaaagaa aaataagcac aagttttatc 180

cggcctttat tcacattctt gccgcctga tgaatgctca tccggaattc cgtatggcaa 240
 tgaaagacgg tgagctggig ataigggata gigtacccc tigtacacc gttttccatg 300
 agcaactga aacgttttca tcgtctgga gtgaatacca cgacgatttc cggcagtttc 360
 tacacatata ttgcaagat gtggcgtgtt acggtgaaaa cctggcctat ttccctaaag 420
 ggtttattga gaatatgttt ttctctcag ccaatccctg ggtgagtttc accagttttg 480
 atttaaactg ggccaatatg gacaacttct tcgccccctt tttaccatg ggcaaatatt 540
 atacgcaagg cgacaaggig ctgatgccgc tggcgattca ggttcatcat gccgtctgtg 600
 atggcttcca tgtcggcaga atgcttaatg aattacaaca gtactgcgat gaggggcagg 660
 gcggggcgta attttttttaa ggcagttatt ggtgccctta aacgtcgacc ggctgctaac 720
 aaagcccgaa agggtttctt gtgtgaaatt gttatccgct 760

<210> 14
 <211> 41
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> 5' primer-2 for CAT

<400> 14
 gaaggagccg ccaccatgga gaaaaaaatc actggatata c 41

<210> 15
 <211> 36
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> 5' primer-2 for 1A2

<400> 15
 gaaggagccg ccaccatgct caaagtcacg gtgccc 36

<210> 16
 <211> 35
 <212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1B2

<400> 16

gaaggagccg ccaccatgga ggagcagcgc tgttc

35

<210> 17

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1C8

<400> 17

gaaggagccg ccaccatggc ccgaaccaag cagac

35

<210> 18

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1D2

<400> 18

gaaggagccg ccaccatggg tgttgacaaa atcattcc

38

<210> 19

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1D9

<400> 19

gaaggagccg ccaccatggt ggagacctac agcaacc

37

<210> 20

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1D10

<400> 20

gaaggagccg ccaccatggc ggtgcagggtg gtgc

34

<210> 21

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1E4

<400> 21

gaaggagccg ccaccatgga tgatcgggag gatctg

36

<210> 22

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1G4

<400> 22

gaaggagccg ccaccatgtc gagttattct agtgac

36

<210> 23

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1H1

<400> 23

gaaggagccg ccaccatggt gaaggtcgggt gtgaac

36

<210> 24

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> 5' primer-2 for 1H5

<400> 24

gaaggagccg ccacatggc caacagtgag cg

32